

TYPIFICATION AND NOMENCLATURAL HISTORY OF *TRACHELOSPERMUM DIFFORME* (APOCYNACEAE)

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ABSTRACT

This study documents type specimens for names associated with the twining vine *Trachelospermum difforme*. Although not cited in the literature, a holotype of *Echites difformis* Walter was discovered in the Thomas Walter herbarium of the Natural History Museum, London. Types and nomenclatural history are discussed for other synonyms and combinations.

RESUMEN

Se documentan tipos para nombres asociados con la enredadera *Trachelospermum difforme*. Aunque no citado en la literatura, fue descubierto un holotipo en el herbario de Thomas Walter en el Museo de Historia Natural, Londres. Se dan tipos e historia de nombres para los sinónimos y combinaciones.

The twining vine *Trachelospermum difforme* (Walter) A. Gray (Apocynaceae) is native to the eastern United States and was first described as *Echites difformis* Walter in 1788. However, Walter did not indicate specimens he had studied. His herbarium is housed at the Natural History Museum (BM), London, and photographs thereof may be found in the collections of the Gray Herbarium (GH) at Harvard University. Walter's herbarium contains 122 sheets, a great many of which are plants of his *Flora Caroliniana* (Walter 1788; Stafleu & Cowan 1988). Although numerous authors proposed new combinations based on Walter's *Echites difformis*, none cited an appropriate type specimen. As typification is an ICBN requisite (Greuter et al. 2000), this study seeks to document types for names associated with the species *Trachelospermum difforme*.

In his treatment of *Forsteronia*, Alphonse de Candolle (1844) cites two specimens for the entity *Trachelospermum difforme*: "in Virginia infer. (Pursh) Carolina! et Mississippi (Torr.! in h. Boiss.)." However, John Torrey was not born until 1796 and Frederick Pursh visited North America for the first time in 1799—well after Walter's *Flora* had been published (Stafleu & Cowan 1983, 1986). For his new combination based on *Echites difformis*, John Miers (1878) cited a Florida specimen ("vs. in herb. Mus. Brit. Florida (Chapman)"). However, this specimen also cannot be considered as Walter's type as it was collected by Alvan Chapman (1809–1899) in 1845, many years after Walter's death in 1789. Lacking further citation in the literature of potential types seen by Walter, a search of the Walter herbarium at BM was undertaken by the author. Fortunately, the

search revealed a specimen of the taxon (Walter 215)—which should thus be considered the holotype of *Echites difformis* Walter.

In 1803, André Michaux proposed the name *Echites puberula* in his *Flora Boreali Americana* for the taxon in question. Three specimens that can be considered types for this name reside at the Muséum National d'Histoire Naturelle (P) in Paris. One specimen exhibits flowers in bud and a handwritten note “*Foresteronia difformis* A. DC.” Another specimen exhibits fully opened flowers (but no labels) and the last exhibits fruiting material. From Michaux's protologue it is clear that both flowering and fruiting materials were available to him at the time of description.

In 1817, Poirét published the name *Tabernaemontana populifolia* and indicated seeing a specimen in “herb. Desfont.” Poirét's name has long been cited in synonymy with *Trachelospermum difforme*. However, Poirét's type at FI-W does not belong to *Trachelospermum* (stems stout; lamina decurrent onto petioles). Recent annotations suggest it belongs to *Logania populifolia* (Lam.) Leeuwenberg (see also Leeuwenberg 1991). A small sachet (5 cm × 5 cm) of likely the same material resides at P, but bears no indication of locality (Aymonin, per. comm.). As the type belongs to another taxon, *Tabernaemontana populifolia* Poir. is here excluded from synonymy with *Trachelospermum difforme* (Walt.) A. Gray.

Miers, in proposing a new combination based on Poirét's name (i.e., *Thyrsanthus populifolius* (Poir.) Miers., Apocyn. S. Amer. 99. 1878.), indicated seeing a specimen collected by “Marshal [sic]” from Georgia in “herb. Mus. Brit.” This specimen is indeed *Trachelospermum difforme* (BM!) and not *Logania populifolia*, however Miers' combination cannot be applied to the former species as ICBN Art. 7.4 holds that new combinations, in all circumstances, are typified by the type of the basionym (Greuter et al. 2000).

In 1836, Rafinesque proposed the name *Echites salicifolia*. However, this name is a *nomen illegitum* since *Echites salicifolia* Willd. ex Roem. & Schult. (= *Allamanda cathartica* L., Apocynaceae) was validly published in 1819 (*Systema Vegetabilium* 4:796). No type specimen could be located for Rafinesque's name. Unfortunately, as Stuckey (1971) notes, Rafinesque's herbarium was partially destroyed by rats after his death and virtually all the remaining material was discarded by Elias Durand. *Echites salicifolia* Raf. is not listed among Rafinesque's North American vascular plants at PH (Stuckey 1971), nor are potential type specimens found in the collections of GH and NY. Inquires with P and DWC also provided no material.

TAXONOMIC SUMMARY

Trachelospermum difforme (Walter) A. Gray, Syn. Fl. N. Amer. 2:85. 1878. *Echites difformis* Walter, Fl. Carol. 98. 1788. *Forsteronia difformis* (Walter) A. DC., Prodr. 8:437. 1844. *Secondatia difformis* (Walter) Benth. & Hook.f., Gen. Pl. 2:710, 723. 1876.

nom. invalid. *Thyrsanthus difformis* (Walter) Miers, Apocyn. S. Amer. 99:1878. *Thyrsanthella difformis* (Walter) Pichon, Bull. Mus. Natl. Hist. Nat. ser. 2, 20:192. 1948. TYPE: Walter 215 (HT:BM!).

Echites puberula Michx., Fl. Bor. Amer. 1:120. 1803. TYPE: Michaux s.n. [protologue: "in sylvis Carolinae inferioris"] (ST: P; IDC Fiche! [three specimens: one with flowers in bud, one with flowers, and one with fruits]).

Echites salicifolia Raf., New Fl. N. Amer. 4:59. 1838 ('1836'), nom. illeg.; non Willd. ex Roem. & Schult. 1819. TYPE: unknown.

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